

### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

10/17/2002

ELLEN S COGEN
GIFFORD KRASS GROH SPRINKLE
ANDERSON & CITKOWSKI
280 N OLD WOODWARD AVENUE SUITE 400
BIRMINGHAM, MI 48009

EXAMINER			
JOHNS, ANDREW W			
ART UNIT	CLASS-SUBCLASS		
2621	382-10000		

DATE MAILED: 10/17/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,950	06/01/2000	THOMAS E. GESTER	DSI-10002/22	5698

TITLE OF INVENTION: METHOD FOR ACQUIRING, STORING AND ANALYZING CRYSTAL IMAGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	01/17/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

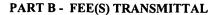
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



# Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

(703)746-4000 Fax

maintenance fee notifications

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block I) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or ELLEN S COGEN formal drawing, must have its own certificate of mailing or transmission. GIFFORD KRASS GROH SPRINKLE Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below. ANDERSON & CITKOWSKI 280 N OLD WOODWARD AVENUE SUITE 400 BIRMINGHAM, MI 48009 (Depositor's name) (Signatu (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/462,950 06/01/2000 THOMAS E. GESTER DSI-10002/22 5698 TITLE OF INVENTION: METHOD FOR ACQUIRING, STORING AND ANALYZING CRYSTAL IMAGES APPLN. TYPE SMALL ENTITY **ISSUE FEE** PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1280 \$0 \$1280 01/17/2003 **EXAMINER** ART UNIT CLASS-SUBCLASS JOHNS, ANDREW W 2621 382-100000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form registered patent attorneys or agents. If no name PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed. ☐ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. Publication Fee ☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_(enclose an extra copy of this form). ☐ Advance Order - # of Copies Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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09/462,950	06/01/2000	THOMAS E. GESTER	DSI-10002/22	5698
75	590 10/17/2002		EXAMIN	ER
ELLEN S COGE	N		JOHNS, AND	DREW W
GIFFORD KRASS ANDERSON & CI	GROH SPRINKLE TKOWSKI		ART UNIT	PAPER NUMBER
280 N OLD WOO! BIRMINGHAM, N	DWARD AVENUE SUI 41 48009	TE 400	2621	
UNITED STATES			DATE MAILED: 10/17/2002	

# Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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ELLEN S COGE	N		JOHNS, AND	REW W
GIFFORD KRASS ANDERSON & C	GROH SPRINKLE TKOWSKI		ART UNIT	PAPER NUMBER
280 N OLD WOO BIRMINGHAM, N	DWARD AVENUE SU 41 48009	ЛТЕ 400	2621	
UNITED STATES			DATE MAILED: 10/17/2002	

## Notice of Possible Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there may be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: <a href="http://www.uspto.gov/main/howtofees.htm">http://www.uspto.gov/main/howtofees.htm</a>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of any fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after October 1, 2002 (or mailed with a certificate of mailing on or after October 1, 2002), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No. Applicant(s)				
• • • • • • • • • • • • • • • • • • • •	09/462,950	GESTER ET AL.			
Notice of Allowability	Examiner	Art Unit			
	Andrew W. Johns	2621			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.					
<del></del>	1. This communication is responsive to the amendment filed 10/7/02.				
<ul> <li>2.  The allowed claim(s) is/are 1-9.</li> <li>3.  The drawings filed on 01 June 2000 are accepted by the E</li> </ul>	Evaminer				
4. Acknowledgment is made of a claim for foreign priority une  a) All b) Some* c) None of the:		)-(d) or (f).			
1. Certified copies of the priority documents have	e been received.				
2.  Certified copies of the priority documents have	e been received in Ap	plication No			
3. Copies of the certified copies of the priority do	cuments have been r	eceived in this national stage applica	ation from the		
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
5. Acknowledgment is made of a claim for domestic priority u					
<ul> <li>(a) ☐ The translation of the foreign language provisional a</li> <li>6. ☐ Acknowledgment is made of a claim for domestic priority u</li> </ul>	• •				
O Acknowledgment is made of a claim for domestic priority of	ilidei 55 0.5.0. 33 12	o and/or 121.			
Applicant has THREE MONTHS FROM THE "MAILING DATE" o below. Failure to timely comply will result in ABANDONMENT of					
7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.					
8. CORRECTED DRAWINGS must be submitted.					
(a) including changes required by the Notice of Draftsper	rson's Patent Drawing	Review ( PTO-948) attached			
1)  hereto or 2)  to Paper No					
(b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner.					
(c) including changes required by the attached Examine	r's Amendment / Com	ment or in the Office action of Paper	No		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.					
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s)					
1☐ Notice of References Cited (PTO-892)	2□ N	lotice of Informal Patent Application	(PTO-152)		
3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  4☐ Interview Summary (PTO-413), Paper N			r No		
<ul> <li>5☐ Information Disclosure Statements (PTO-1449), Paper No</li> <li>7☐ Examiner's Comment Regarding Requirement for Deposit</li> </ul>		xaminer's Amendment/Comment xaminer's Statement of Reasons for	Allowance		
of Biological Material	9□ 0		, wowante		

Application/Control Number: 09/462,950

Art Unit: 2621

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## Response to Amendment

1. The amendment filed 07 October 2002 has been entered in part. Specifically, the newly submitted claims have <u>not</u> been entered, as they raise new issues that would require further search and/or consideration (see M.P.E.P. §§ 714.14 and 714.20). In particular, the newly added independent claims do not include any of the features that have previously been identified as not being taught or suggested by the prior art. Therefore, each of these independent claims would require further search and/or consideration, and have therefore not been entered. The remainder of the amendment was directed towards resolving the outstanding formal matters identified in the previous Office Action (paper no. 5, mailed 04 September 2002), and these changes have been entered, to place the application in condition for allowance.

## Allowable Subject Matter

- 2. Claims 1-2, 3-5, 6, 7, 8 and 9 (now renumbered for issue as 1-2, 5-7, 3, 8, 4, and 9, respectively) are allowed.
- 3. The following is an examiner's statement of reasons for allowance: While Hartley et al. does use image analysis to classify and sort crystals, Hartley et al. fails to teach or suggest key features of the claimed invention. Specifically, claim 1 requires, in part, a computer processing unit that performs at least one of the functions of counting crystals, generating three-dimensional surface plots of crystals within a database, or determining crystal size by determination of the length of the crystal perimeter. Claim 3 requires, in part, a T-squared filter to identify at least one crystal. Claim 7 requires, in part, an optical fiber extending between a light source and the crystal. Claims 9 requires, in part, the simulation of edges of crystals missing from the image generated by the camera. The prior art fails to teach or suggest any of these features, in combination with the other limitations of the claimed invention.

Application/Control Number: 09/462,950

Art Unit: 2621

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5 Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Johns whose telephone number is (703) 305-4788. The examiner in normally available Monday through Friday, at least during the hours of 9:00 am to 3:00 pm Eastern Time. The examiner may also be contacted by e-mail using the address: andrew.johns@uspto.gov. (Applicant is reminded of the Office policy regarding e-mail communications. See M.P.E.P. § 502.03)

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leo Boudreau, can be reached on (703) 305-4706. The fax phone number for this art unit is (703) 872-9314. In order to ensure prompt delivery to the examiner, all unofficial communications should be clearly labeled as "Draft" or "Unofficial."

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Customer Service Office whose telephone number is (703) 306-0377.

25 A. Johns 16 October 2002

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ANDREW W. JOHNS
PRIMARY EXAMINER